

86. The method of claim 85 further comprising rigidly affixing the asynchronous field filtering shield to the rotor assembly.

87. The method of claim 85 further comprising positioning a flux return path circumferentially about the outer surface of the end turn sections of the at least one stator coil assembly.

In the abstract:

Please replace the abstract with the following version.

A method of maintaining a desired level of sub-transient reactance in a superconducting machine includes specifying a desired level of sub-transient reactance. A stator assembly is produced that includes at least one stator coil assembly having a first predefined length. A rotor assembly is produced that is configured to rotate within the stator assembly. An asynchronous field filtering shield, having a second predefined length that is less than the first predefined length, is positioned between the stator assembly and the rotor assembly. The desired level of sub-transient reactance is achieved by adjusting either the first predefined length or the second predefined length.